

INFORMATION DISCLOSURE
CITATION

(Use several sheets if necessary)

Atty. Docket No.

160-399

Applicant

NAKAMURA et al.

Filing Date

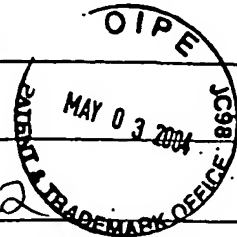
November 24, 2003

Serial No.

10/718,652

IC/A.U.

2828-2822



U.S. PATENT DOCUMENTS

EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
IMS	5.793,054	08/1998	NIDO	257	18	

FOREIGN PATENT DOCUMENTS

TRANSLATION

	DOCUMENT	DATE	COUNTRY	CLASS	SUBCLASS	YES	NO
IMS	JP 6-164085	06/1994	JAPAN			ABSTRACT	
IMS	JP 6-268259	09/1994	JAPAN			ABSTRACT	
IMS	JP 6-268257	09/1994	JAPAN			ABSTRACT	
IMS	JP 7-249795	09/1995	JAPAN			ABSTRACT	
IMS	JP 8-070139	03/1996	JAPAN			ABSTRACT	
IMS	JP 9-191160	07/1997	JAPAN			ABSTRACT	
IMS	JP 7-235729	09/1995	JAPAN			ABSTRACT	
IMS	JP 9-148247	06/1997	JAPAN			ABSTRACT	
IMS	JP 9-148678	06/1997	JAPAN			ABSTRACT	
IMS	JP 6-164055	06/1994	JAPAN			ABSTRACT	
IMS	JP 9-116225	05/1997	JAPAN			ABSTRACT	
IMS	JP 8-064910	03/1996	JAPAN			ABSTRACT	
IMS	JP 8-116128	05/1996	JAPAN			ABSTRACT	
IMS	JP 9-129925	05/1997	JAPAN			ABSTRACT	
IMS	JP 8-316581	11/1996	JAPAN			ABSTRACT	
IMS	EP 0 805 500	11/1997	EP			X	
IMS	JP 7-235729	09/1995	JAPAN			ABSTRACT	

OTHER DOCUMENTS (including Author, Title, Date, Pertinent pages, etc.)

IMS	AKASAKI et al., "Stimulated Emission by Current Injection from an AlGaIn/GaN/GaInN Quantum Well Device." Jpn. J. Appl. Phys., Vol. 34 (1995), pp. L1517-L1519
IMS	NAKAMURA et al., "High-power InGaIn Single-Quantum-Well-Structure Blue and Violet Light-Emitting Diodes." Appl. Phys. Lett., Vol. 67, No. 13 (1995), pp. 1868-1870
IMS	NAKAMURA et al., "Candela-Class High-Brightness InGaIn/AlGaIn Double-Heterostructure Blue-Light-Emitting Diodes." Appl. Phys. Lett. Vol. 64, No. 13 (1994), pp. 1687-1689
	NARUKAWA et al., "Recombination Dynamics of InGaIn Quantum Wells by Time-Resolved Photoluminescence," Technical Report of the Institute of Electronics, Information and Communication Engineers (Oct. 1996) (Japan), pp. 81-88
IMS	WAKAHARA et al., "Growth of GaInN Alloy Layer and Its Composition Inhomogeneity," Technical Report of the Institute of Electronics, Information and Communication Engineers (Oct. 1996) (Japan), pp. 15-20
	NAKAMORI, T., "Unveiling the Structure of Pulse-Oscillate GaN Blue-Violet Semiconductor Laser." Nikkei Electronics (Jan. 1996) (Japan) No. 653, pp. 13-15
	NAKAMURA, S., "Development of Blue Device in Final Stage," Electronics (Feb. 1996) (Japan), pp. 1-3
	NAKAMURA, S., "Latest Progress in Nitride-Based Blue/Green LED and Semiconductor Laser," International Forum "Blue Light-Emission" Project of Hoso-Bunka Foundation, Inc. (May 1996) (Japan) pp. 53-60.

*Examiner

Date Considered

Examiner: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to application.

**INFORMATION DISCLOSURE
CITATION**

ATTY. DOCKET NO.

160-399

DIVISIONAL OF SERIAL NO.

10/229,067

APPLICANT

Nakamura et al

(Use several sheets if necessary)

FILING DATE

November 24, 2003

GROUP

2822

U.S. PATENT DOCUMENTS

*EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
IMS	5,684,309	11/1997	McIntosh et al	257	24/91	
	4,862,471	8/1989	Pankove	372	45.01	
	5,646,953	7/1997	Naito et al	372	46.01	
	5,642,376	6/1997	Olbright et al	372	45.99	
	5,475,700	12/1995	Iwata	372	45.01	
	5,247,533	9/1993	Okazaki et al	372	42.45.01	
	5,959,307	9/1999	Nakamura et al	257	14	
	5,679,965	10/1997	Schetzina	257	103	
	5,412,226	5/1995	Rejman-Greene et al	257	21	
	5,751,013	5/1998	Kidoguchi et al	257	13	
	5,689,123	11/1997	Major et al	257	190	
	6,005,258	12/1999	Manabe et al	257	13	
IMS	5,247,533	9/1993	Okazaki et al	372	45.01	

FOREIGN PATENT DOCUMENTS

DOCUMENT	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION YES NO
0 675 552 A1	10/1995	Europe			
6-21511	1/1994	Japan			
3-290984	4/1990	Japan			
4-218994	8/1992	Japan			
7-074431	3/1995	Japan			X
61-156788	7/1986	Japan			X
08/290218	10/1996	Japan			X
6-268257	6/1994	Japan			X
6-177423	6/1994	Japan			X
7-235723	9/1995	Japan			
4-68579	3/1992	Japan			
4-242985	8/1992	Japan			
6-177423	6/1994	Japan			
6-21511	1/1994	Japan			
6-237039	8/1994	Japan			
7-297447	11/1995	Japan			
6-232451	8/1994	Japan			X

OTHER DOCUMENTS (Including Auth r, Titr , Date, Pertinent pages, tc.)

*Examiner	<i>John M. Szwed</i>	Date Considered	12-19-05
-----------	----------------------	-----------------	----------

Examiner: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to application.

**INFORMATION DISCLOSURE
CITATION**

ATTY. DOCKET NO.

160-399

DIVISIONAL OF SERIAL NO.

10/229,067

APPLICANT

Nakamura et al

(Use several sheets if necessary)

FILING DATE

November 24, 2003

GROUP

2822

OTHER DOCUMENTS (including Author, Title, Date, Pertinent pages, etc.)

	Narukawa et al Phys. Rev. B Vol. 55, No. 4, pp R1938-1941-1/97 Recombination dynamics of localized excitons in $\text{In}_{0.20}\text{Ga}_{0.80}\text{N-In}_{0.05}\text{Ga}_{0.95}\text{N}$ multiple quantum wells
	Narukawa et al Appl. Phys. Lett. 70 (8), pp 981-983, 2/1997 Role of self-formed InGaN quantum dots for exciton localization in the purple laser diode emitting at 420 nm
	Narukawa et al Appl. Phys. Lett., Vol. 74, No. 4 pp 558-560 1/99 Radioactive and nonradiative recombination processes in ultraviolet light-emitting diode composed of an $\text{In}_{0.02}\text{Ga}_{0.98}\text{N}$
	Nakamura et al Jpn. J. Appl. Phys., Vol. 35, pp L74-L76, Part 2, No. 1B, 1/96 InGaN-Based Multi-Quantum-Well Structure Laser Diodes
	Nakamura et al Jpn. J. Appl. Phys., Vol. 35 (1996), pp L217-220, Part 2, No. 2B, 2/96 InGaN Multi-Quantum-Well Structure Laser Diodes with Cleaved Mirror Cavity Facets:
	Nakamura et al Appl. Phys. Lett. 69 (11), pp. 1568-1570, 9/96 Optical gain and carrier lifetime of InGaN multi-quantum well structure laser diodes
	Jpn J. Appl. Phys. Vol. 34 (1995) pp. L1332-L1335, Part 2, No. 10B, 15 Oct. 1995, "Superbright Green InGaN Single-Quantum-Well-Structure Light-Emitting Diodes"
	Technical Report of IEICE, ED96-100, CPM96-78 (1996-10), pp. 15-21
	Technical Report of IEICE, ED96-110, CPM96-88 (1996-10), pp. 81-88
	Appl. Phys. Lett., 38 (11) June 1981 pp 835-837

*Examiner

Date Considered

12-19-05

Examiner: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to application.